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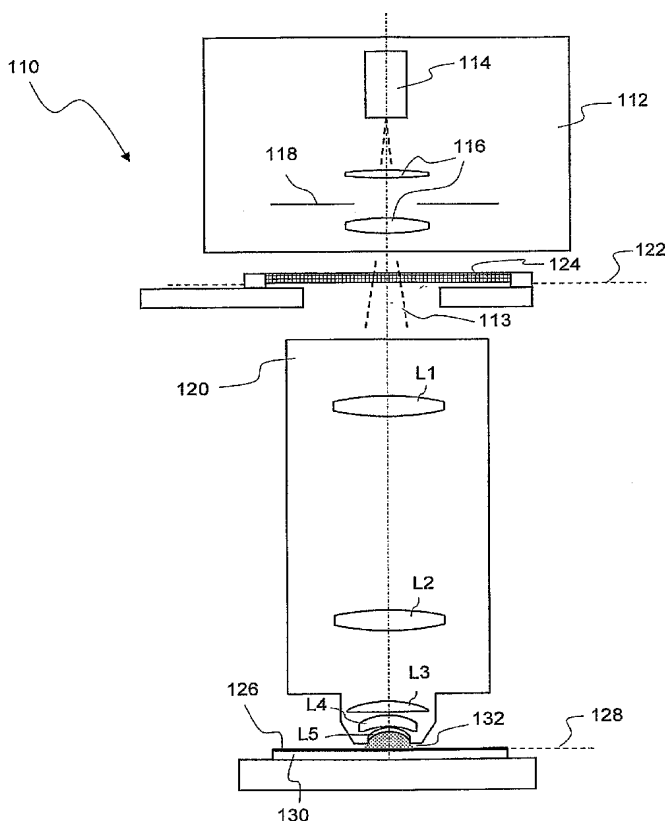
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(54) Title: PROJECTION OBJECTIVE FOR A MICROLITHOGRAPHIC PROJECTION EXPOSURE APPARATUS



(57) Abstract: A projection objective of a microlithographic projection exposure apparatus (110) is designed for immersion operation in which an immersion liquid (134) adjoins a photosensitive layer (126). The refractive index of the immersion liquid is greater than the refractive index of a medium (L5; 142; L205; LL7; LL8; LL9). that adjoins the immersion liquid on the object side of the projection objective (120; 120'; 120"). The projection objective is designed such that the immersion liquid (134) is convexly curved towards the object plane (122) during immersion operation.

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